Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KNUT KESSEL, GUNSTER SCHERR, MICHAEL KLUGE, NORBERT BIEDERMANN, THOMAS GREINDL, THOMAS BOGENSTRATTER, and WOLFGANG HAHNLEIN

> Appeal No. 2002-0439 Application No. 09/391,384

> > ON BRIEF

Before WINTERS, SCHEINER, and MILLS, <u>Administrative Patent Judges</u>.

MILLS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. §134 from the examiner's final rejection of claims 1-7, which are all of the claims pending in this application.

Claim 1 is illustrative of the claims on appeal and reads as follows:

1. In a process for the preparation of creatine or creatine monohydrate by reaction of sodium or potassium sarcosinate with cyanamide at a temperature of from 20 to 150°C and a pH from 7.0 to 14.0, the improvement which comprises carrying out the pH adjustment with carbonic acid.

The prior art references relied upon by the examiner are:

Weiss et al (Weiss) 5,719,319 Feb. 17, 1998

Takahashi et al (Takahashi) JP 04040288 A2 Feb. 10, 1992

(Abstract only)

Grounds of Rejection

Claims 1-7 stand rejected under 35 U.S.C. 103(a) for obviousness over Weiss in view of Takahashi.¹

We reverse this rejection.

DISCUSSION

In reaching our decision in this appeal, we have given consideration to the appellants' specification and claims, to the applied references, and to the respective positions articulated by the appellants and the examiner.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the noted rejections, we make reference to the examiner's Answer for the examiner's reasoning in support of the rejection, and to the appellants' Brief for the appellants' arguments thereagainst. As a consequence of our review, we

We note that neither the examiner nor appellants have provided a full text translation of Takahashi. Citation of and reliance upon an abstract without citation of and reliance upon the underlying scientific document is generally inappropriate where both the abstract and the underlying document are prior art. See Ex-parte-Jones, 62 USPQ2d 1206, 1208 (Bd Pat. App. & Inter. 2001) (unpublished); MPEP 706.02 and April 29, 2002 internal policy Memo of Kunin. While we could remand this application to permit the examiner and/or appellants to obtain a copy and translation, we choose to consider this rejection on the merits as it comes to us. Finding no prejudice to appellants, we render our decision based upon the abstract only. Note, Brief, page 4.

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make the determinations which follow.

35 U.S.C. § 103

Claims 1-7 stand rejected under 35 U.S.C. 103(a) for obviousness over Weiss in view of Takahashi.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). It is well-established that the conclusion that the claimed subject matter is <u>prima facie</u> obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

It is the examiner's position that (Answer, page 4):

Weiss teaches a process for the preparation of creatine or creatine monoydrate by the reaction of cyanamide with sodium or potassium sarcosinate in water, or a mixture of organic solvent and water, in a temperature range of from 20-150°C and a pH between 7 and 14. The pH may be adjusted with various acids and bases, including formic acid [H-COOH] (column 2, lines 3-18).

Takahashi is relied on for its disclosure of an apparatus for the treatment of wastewater from construction with controlled pH adjustment, for example with carbon dioxide². <u>Id</u>. The examiner indicates that Takahashi supports the general principle that carbon dioxide may be used to control pH of an aqueous solution. <u>Id</u>. The examiner concludes that "it would have been obvious to one of ordinary skill in the art at the time of the present invention to control the pH of the reaction of Weiss using carbon dioxide, given that Weiss teaches specific reaction pH parameters and that it is well known in the chemical arts that carbon dioxide may be used to control the pH of an aqueous solution." <u>Id</u>.

Appellants respond, arguing (Brief, page 4), "It is difficult to imagine that one of ordinary skill in the art of organic chemistry would consider the requirements of an organic synthesis sufficiently similar to sewage treatment to refer to references related to the latter for techniques to apply to the former." Thus, appellants argue that the combination of references is without motivation and does not support a <u>prima facie</u> case of obviousness. Brief, page 5.

Appellants indicate that hydrochloric acid has corrosive properties and formic acid and acetic acid lead to waste water pollution resulting from creatine or creatine monoydrate processes using such pH adjusters. (Specification, page 1, lines 35-40; Brief, page 2).

² Carbon dioxide is an alternative nomenclature for carbonic acid gas. Carbonic acid gas is defined as a hypothetical acid of carbon dioxide and water. See, <u>Grant and Hackh's Chemical Dictionary</u>, 5th ed., McGraw Hill Book Co, New York, p. 113-114 (1987),

We agree with appellants that the examiner has not provided an indication of sufficient motivation to combine the cited references to support a <u>prima facie</u> case of obviousness. To begin, two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. <u>In re Clay</u>, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). <u>See also In re Deminski</u>, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); <u>In re Wood</u>, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979). In our view, the examiner has not properly established that Takahashi, dealing with wastewater treatment is analogous art to the claimed process for the preparation of creatine or creatine monohydrate.

Moreover, it is well-established that the conclusion that the claimed subject matter is <u>prima facie</u> obvious must be supported by a preponderance of evidence, as shown by some <u>objective</u> teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. <u>See In re Fine</u>, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); <u>In re Oetiker</u>, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). As set forth in <u>In re Kotzab</u>, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000):

Most if not all inventions arise from a combination of old elements. [] Thus, every element of a claimed invention may often be found in the prior art. [] However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. [] Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. [citations omitted]

In other words, "there still must be evidence that 'a skilled artisan, . . . with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.'" <u>Ecolochem Inc. v. Southern</u>

<u>California Edison</u>, 227 F.3d 1361, 1375, 56 USPQ2d 1065, 1075-76 (Fed. Cir. 2000).

"It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art." In re Wesslau, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965); see also In re Mercer, 515 F.2d 1161, 1165-66, 185 USPQ 774, 778 (CCPA 1975).

In the present case, the examiner has failed to indicate and provide sufficient evidence of the specific understanding or principle within the knowledge of a skilled artisan, explicit or implicit, that would have motivated one with no knowledge of appellants' invention to make the combination in the manner claimed. In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). In re Kotzab, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000). What is missing from the examiner's analysis is why one of ordinary skill in the art would have been motivated to

select carbon dioxide, from a large group of known organic and inorganic acids, or why an acid which is acceptable for the use in the adjustment of wastewater treatment would be appropriate for use in a specific chemical synthesis of creatine or creatine monohydrate.

On facts and record before us, we find that the examiner has not established a prima facie case of obviousness. The rejection is reversed.

REVERSED

SHERMAN D. WINTERS
Administrative Patent Judge

DEMETRA J. MILLS
Administrative Patent Judge

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